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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,994	01/22/2004	Masaaki Ogura	RCOH-1068	5991

21302 7590 06/13/2008  
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EXAMINER
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ZHANG, SHIRLEY X

ART UNIT	PAPER NUMBER
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2144

MAIL DATE	DELIVERY MODE
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06/13/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/762,994	<b>Applicant(s)</b> OGURA, MASAOKI	
	<b>Examiner</b> SHIRLEY X. ZHANG	<b>Art Unit</b> 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 9-15, 20-26, 31-37 and 42-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-15, 20-26, 31-37 and 42-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 5-8, 16-19, 27-30 and 38-41 have been cancelled;

Claims 1-4, 9-15, 20-26, 31-37 and 42-44 are pending;

Claims 1-4, 9-15, 20-26, 31-37 and 42-44 are rejected.

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 08, 2008 has been entered.

### ***Response to Amendment***

2. Applicant's arguments and amendments filed on April 8, 2008 have been carefully considered. The examiner's response can be found below in the section titled "Claim Rejections – 35 USC § 103".

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities:

Claim 1 recited in the last paragraph "determining that the previously detected abnormal condition has not been removed by the temporarily switching off of the power supply", where the meaning derived from "has **not**" appears to be inconsistent with the rest of the claim

limitations. Therefore, the examiner treats the "has not" as a typographical error of "has" in the claim rejection below.

Appropriate review and clarification by the applicant is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1-4, 9-15, 20-26, 31-37, and 42-44** are rejected under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 7,016,955 to Martin et al. (hereinafter “**Martin**”), in view of the related U.S. patent application publication No. 2002/0143917 to Stevenson et al. (hereinafter “**Stevenson**”), U.S. Patent No. 5,897,252 to **Kanakubo** and U.S. Patent No. 6,970,923 to Mukaiyama et al. (hereinafter “**Mukaiyama**”).

**Regarding claim 1**, Martin discloses a method of communicating, comprising the steps of:

detecting one of a predetermined set of abnormal conditions at a plurality of managed devices (column 5, lines 44-47 discloses that managed network device sends to the network management station SNMP linkUp and linkDown traps to indicate that a port on the device has gone up or down. SNMP linkDown and linkUp are traps predefined in the SNMP specification RFC 1157, where linkDown is a type of abnormal condition while linkUp is the corresponding abnormal condition removal information);

transmitting abnormal condition information including a corresponding abnormal condition type on the detected abnormal condition from the managed device to a management device the corresponding managed device defining an originating managed device (column 5, line 6-8 and column 5 line 39-58 discloses that the managed devices detect and send to the management station SNMP Traps to indicate abnormal conditions on the devices);

receiving the abnormal condition information at the management device to store and manage the received abnormal condition information (column 4, line 52-57 discloses that the network management station communicates with the managed network devices to receive abnormal condition information);

sending a power activation report from the originating managed device to the management device upon temporarily switching off a main power supply of the originating managed device for subsequent power activation prior to removal of the previously detected abnormal condition from the managed device (column 5, line 38-43 discloses that the managed network device sends to the management station an SNMP Warm/Cold Start trap to indicate that it has rebooted; the Warm/Cold Start trap is sent prior to the "Link Up Trap" which is the abnormal condition removal event for the abnormal condition "Link Down");

receiving the power activation report at the management device (column 5, line 38-43);

detecting removal of the previously detected abnormal condition from the originating managed devices (column 8, line 30-43 discloses that a "Link Up Trap" indicates that the previous abnormal condition of "Link Down" has been removed);

transmitting from the originating managed device to the management device an abnormal condition removal call corresponding to the previously detected abnormal condition; receiving the abnormal condition removal call at the management device (column 5, lines 44-47 disclose that a managed network device sends to the network management station an SNMP trap

indicating that a port on the device has gone up or down, e.g., SNMP linkUp or linkDown traps, where the linkDown trap is equivalent to the abnormal condition call recited in the claim while linkUp trap is the abnormal condition removal call);

notifying a center operator of the detected abnormal condition if the abnormal condition removal call or the power activation report has not been received within a first predetermined amount of time t1 since the reception of the abnormal condition information at the management device (Fig. 3, column 9, lines 49-67 and column 10, lines 1-50 discloses that at step 104, the management station sets timers for abnormal events of types 1, 2 or 3 and then waits for the abnormal condition removal events of types 1a, 2a or 3a to arrive at step 107; at step 106, the abnormal events are displayed to the user; at step 103 and 115, abnormal condition removal events that correspond to the previously reported abnormal events are displayed to indicate to the user that the respective abnormal events have resolved within the set time period, see column 11, lines 7-9; therefore the display of an abnormal event without the corresponding abnormal condition removal event serves as a notification to the user or a center operator that the abnormal condition has persisted for a predetermined amount of time);

determining that the previously detected abnormal condition has **(not)** been removed, if so determined, deleting a corresponding one of the abnormal condition information stored at the management device based upon the received abnormal condition removal call and the stored abnormal condition information (Stevenson, [0045] discloses that the management systems with limited memory space for the event log will automatically preferentially delete these events along with other low severity events).

One would have been motivated to combine Martin and Stevenson because they have common inventors, and Martin cross-references Stevenson in column 1, lines 23-25.

As for the claim limitation “*notifying a center operator of the detected abnormal condition if the corresponding abnormal condition removal call has not been received from the originating managed device within a second predetermined amount of time  $t_2$  since the reception of the power activation report at the management device, even if the power activation report has been received within the first predetermined amount of time  $t_1$  since the reception of the abnormal condition information at the management device*”, Martin discloses a method and system for filtering and selectively displaying events by using timers, and comparing later received events with prior events to decide whether the previously reported abnormal condition has been resolved so that the user or network operator can pay attention to unresolved abnormal conditions, where a timer can be reset by a second event. More specifically, Martin’s disclosure in Fig. 3 and column 9 and 10 lays out a structure that allows a first event E to activate a timer (step 104), and a second event E’ to stop the first timer and restart a second timer (step 112 and 114).

When applied to a specific type of devices such as the printers disclosed by Kanakubo in Fig. 6-9 and column 7, lines 25-40, Martin's system would have operated in the way as described in the claim. In Kanakubo, when an error is detected in the printer, the power controller determines whether or not the error removal operation occurs within the predetermined period of time. If determined not, the power controller shuts off the power to the controller. Then when



the power is turned on in an error state, the err-removal operation is made, and the normal operation is restored (Kanakubo, column 7, lines 25-40)

One skilled in the art would have been motivated to combine Martin with Kanakubo by the teaching in Mukaiyama of a remote device management system that uses SNMP MIB to monitor abnormalities that has occurred in the printing device (Mukaiyama, column 1, lines 47-50), where Martin's system is a remote device management system for Kanakubo's printing device .

Regarding the claim limitation "notifying a center operator", the examiner interprets Martin's disclosure in column 11, lines 7-9 that "when the most relevant event is resolved or concluded, an event is additional entered to show this to the user" as a way of notifying a center operator of the abnormal condition because the unresolved abnormal events can be identified as those that do not have the corresponding concluding events displayed.

**Regarding claim 2**, the combination of Martin, Stevenson, Kanakubo and Mukaiyama discloses the method of communicating according to claim 1.

Martin further discloses that the abnormal condition information is distinct for each of the managed devices, and the abnormal condition information is stored and managed for each of the managed devices at the management device (column 4, line 52-58 discloses using SNMP. It is inherent in SNMP that MIB data transported by SNMP is distinct for each device because it contains a unique identifier for every managed device. See IETF RFC-1157, "A Simple Network Management Protocol (SNMP)"), and the abnormal condition information is stored and managed for each of the managed devices at the management device (column 5, line 9-16, the

network management application processes the received data, generates and logs events in memory).

**Regarding claim 3**, the combination of Martin, Stevenson, Kanakubo and Mukaiyama discloses the method of communicating according to claim 2.

Martin further discloses that the abnormal condition removal call is distinct for each of the abnormal condition types (Martin specifically teaches in column 5, lines 44-47 that managed network device sends to the network management station SNMP linkUp and linkDown traps to indicate that a port on the device has gone up or down. SNMP linkDown and linkUp are traps predefined in the SNMP specification RFC 1157, where linkDown is a type of abnormal condition while linkUp is the corresponding abnormal condition removal information. The examiner would like to further point out that SNMP linkUp and linkDown are merely examples of SNMP traps. Many other device specific traps may be defined using MIB, as is also disclosed in Martin, column 5, line 50. For more information on SNMP traps and MIBs for printing devices, the applicant is recommended to review the document IETF RFC 1759, "Printer MIB", in which many abnormal condition types are defined with a unique object ID for identification purpose, and the leading edge events and trailing edge events disclosed in section 2.2.13.4 correspond to the abnormal conditions and abnormal condition removals recited in the current application, respectively).

**Regarding claim 4**, the combination of Martin, Stevenson, Kanakubo and Mukaiyama discloses the method of communicating according to claim 1.

Martin further discloses that the abnormal condition removal call indicates the removal of all of the abnormal conditions at a single one of the managed devices (column 8, line 8-12, where “IP Ping Start” indicates removal of all side effect events such as “Warm/Cold Start Trap”, “IP Ping Stop” and “Link Down”).

**Regarding claim 9**, the combination of Martin, Stevenson, Kanakubo and Mukaiyama discloses the method of communicating according to claim 1.

Martin further discloses that the method comprises additional steps of:

storing user information for each of the managed devices at the management device (Martin, column 4, line 58-63, it is inherent in SNMP that the management device stores the user information such as destination address); and

determining the first predetermined amount of time  $t_1$  based upon the stored user information (Stevenson, [0064], where the predefined time interval is dependent upon the monitored characteristic and the device).

**Regarding claim 10**, the combination of Martin, Stevenson, Kanakubo and Mukaiyama discloses the method of communicating according to claim 1.

Martin further discloses that the method comprises additional steps of:

storing device information for each of the managed devices at the management device (Martin, column 4, line 58-63 discloses using SNMP; It is inherent in SNMP that the management device stores the user information such as destination address); and

determining the second predetermined amount of time t2 based upon the stored device information (Stevenson, [0064], where the predefined time interval is dependent upon the monitored characteristic and the device).

**Regarding claim 11**, the combination of Martin, Stevenson, Kanakubo and Mukaiyama discloses the method of communicating according to claim 1.

Martin further discloses that the abnormal condition information, the abnormal condition removal call and the power activation report are written in a predetermined structured language (column 4, line 58-63 discloses using SNMP; it is inherent in SNMP that MIB data is written in ASN.1 format, which is a predetermined structured language) and sent through firewalls (for network security reasons, firewalls are very common in a management network; Examiner considers "firewall" as a non-essential feature for the present invention).

**Claims 12-15 and 20-22** each lists all the same elements of **claims 1-4 and 9-11**, **respectively**, but in memory medium form rather than method form. Therefore, the supporting rationale of the rejection to **claims 1-4 and 9-11** applies equally as well to **claims 12-15 and 20-22**.

**Claims 23-26 and 31-33** each lists substantially the same elements of **claims 1-4 and 9-11**, **respectively**, but in apparatus form rather than method form. Therefore, the supporting

rationale of the rejection to **claims 1-4 and 9-11** applies equally as well to **claims 23-26 and 31-33**.

**Claims 34-37 and 42-44** each lists substantially the same elements of **claims 1-4 and 9-11, respectively**, but in system form rather than method form. Therefore, the supporting rationale of the rejection to **claims 1-4 and 9-11** applies equally as well to **claims 34-37 and 42-44**.

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6366741 B1      Fukushima; Kazuyoshi      Image-forming apparatus system and method for remotely supervising a plurality of image-forming apparatuses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHIRLEY X. ZHANG whose telephone number is (571)270-5012. The examiner can normally be reached on Monday through Friday 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. X. Z./  
Examiner, Art Unit 2144  
05/30/2008  
/John Follansbee/

Supervisory Patent Examiner, Art Unit 2151